



## Memorandum

*To: Rick Sun, Los Angeles County Department of Public Works*

*From: Wendy Katagi, CDM Smith*  
*Kasie Auger, CDM Smith*

*Date: November 02, 2015*

*Subject: Draft Daily Biological Monitoring for the Oxford Retention Basin Multiuse Enhancement Project*

## Introduction

This memorandum summarizes the findings of biological monitoring on November 02, 2015, for the Oxford Retention Basin Multiuse Enhancement project. Information regarding the regulatory drivers and methodology of daily biological monitoring can be found in the Biological Monitoring – Introduction and Methods for Phase 2 Construction Memo, dated June 23, 2015.

Biological monitoring was conducted by Kasie Auger, CDM Smith biologist, beginning at 6:20 am and ending at 4:45 p.m. Weather conditions were clear in the morning transitioning to dark and very windy in the afternoon, with temperatures ranging from 61°F in the morning to a high of 71°F in the afternoon. No measurable rain was recorded during construction activities.

During the daily monitoring, the biologist observed activities associated with concrete wall preparations, placement of rock to extend the gabion peninsula, tide gate reconstruction, trash removal, and signage placement. All crews were overseen by the contractor superintendent and the Inspector of Record.

The following sections provide the biologist's field-log notes, with observations of the day's activities and wildlife presence and behavior.

## Biologist's Field Log

6:20 am. Biological monitor arrives on site to conduct initial assessment. The construction trailer gate is open. A few crew members are on site. While conducting the initial survey, several birds are observed. Crows are observed inside the staging area and along northern fence. Two Anna's hummingbirds fly overhead and are also seen and heard in yards near bike path. Western gulls fly overhead. One Great Blue Heron lands in the Central Basin near the channel and remains for about 30 minutes.

6:55 am. Biological monitor conducts biological awareness training and cautions crew to avoid Monarch butterflies, Great egrets, Snowy egrets, and Anna's hummingbirds, as well as the Great

Blue Heron observed standing in the Basin. Crew are reminded to pick up trash around the worksite and to move slowly in areas where wildlife are present or likely to be present.

7:15 am. Work begins for the day. Work continues on the gabion peninsula and the southwestern tide gates. Biologist spoke with CDM Smith Project Manager about ensuring BMPs are in place in preparation for possible rain. Heermann's gull is seen flying over trailer.

7:40 A crow flies overhead towards palm trees off Washington Boulevard. Two crows sit on either side of South East channel. A mourning dove lands on a tower off Admiralty Way.

8:00 Crows land in the Central Basin. Four crows stand along south shore. Four rock pigeons fly near towers across street. A crow caws from palm north of Washington Boulevard. Dragonflies buzz around Central Basin. A crow lands on wire above storm water inlet. A crow flies overhead parallel with Washington Boulevard.

8:15 A yellow butterfly (Harford's Sulphur) flies around and lands on the northeast bank. A large group flies over a nearby hotel.

8:30 Two western gulls fly towards ocean. Anna's hummingbirds are heard but not seen in trees along bike path. Western gull flies along Washington Boulevard.

8:45 A Black-chinned hummingbird is perched atop a tree and calling in trees along bike path. Rock pigeons sit atop towers across Admiralty Way.

9:00 A Black Phoebe moves swiftly around southeast channel, landing on stakes momentarily and then moves on. A Yellow-rumped Warbler is observed in a palm tree at end of the Southeast channel. An Anna's hummingbird is hovering above the southeast channel.

9:30 A Great Egret lands in the Central Basin and continues to move about the Basin avoiding the large excavators until lunch time.

10:00 A small unidentified red butterfly is observed in the East Basin. Two rock pigeons fly overhead. Crows fly over.

10:30 One western gull flies overhead. One crow is cawing from a utility line above the stormwater inlet.

10:45 An Anna's humming bird is twittering near the bike path. Insects are observed moving about stagnant pond in channel.

11:00 A crow flies around the East Basin. A Great Egret tries to eat something from some bushes along southern shore.

11:30 A crow flies overhead. Insects fly over a puddle in front of tide gates. A Western gull flies over. A small white moth flies over vegetation in pots near trailer.

12:00 The crew and biomonitor break for lunch.

12:50 Work resumes. Two western gulls soar overhead. Crows fly overhead. Wildlife observations are significantly reduced after lunch.

1:30 A ladybug flies over the northeast peninsula. Dragonflies are observed in the Central Basin. One Monarch butterfly flies above channel towards the bike path, leaving the site.

2:00 Strong winds pick up after lunch. Three western gulls fly overhead and offsite toward Washington Boulevard.

2:30 Dragonflies are observed in the West Basin. Western gulls and one Heermann's gull fly overhead.

3:15 Crew continues building the berm. No wildlife are observed.

3:45 Several western gulls fly overhead. An Anna's hummingbird is heard but not seen. Strong winds and darker clouds approach the site. Western gulls begin to swarm the parking lot because a woman is feeding them. Pigeons join the gulls to feed.

4:15 Surroundings are getting very dark, cold, and windy.

4:30 Crows are observed over the stormwater inlet.

4:45 Crews and biological monitor leave for the day. Light rain begins to fall.

## **Additional Observations**

Mostly crows and western gulls were observed today. One great blue heron was seen early in the morning. One great egret landed in the Central Basin and continued to move around for several hours avoiding the machinery. After lunch the weather continued to get windy, dark and cold. Few birds were seen after lunch. It began to rain as all crews and biological monitor left for the day.

## **Conclusions**

Based on observations made during monitoring, the following conclusions were made:

1. Biological awareness training emphasizes caution to avoid harm to birds and wildlife in and around the Basin during construction activities.
2. In general, wildlife is most active in the morning with a dramatic decrease in observed wildlife activity after 10:00 am. Wildlife activity did not increase during the late afternoon, perhaps due to the high winds.
3. Insects are now less common, but still include several species of dragonflies and butterflies,

including monarch, and sulphurs. Butterflies are attracted to the moist soils and flowering plants.

4. There is very little standing water left in the Basin. What is left is in small pools near the east side spillway, the north side spillway, and the tide gates at the west end.
5. Wildlife activity largely consists of flyovers and occurs around the periphery of the project site; very little activity is observed within the Basin itself. Crows and western gull fly overs are now the most prevalent species of wildlife. Wildlife activity is concentrated along Admiralty Way and Washington Boulevard, and near the bike path and Yvonne Burke Park.

**Table 1 provides a list of bird species observed during biological monitoring on November 2, 2015.**

<b>Table 1. Bird Species Observed during Biological Monitoring on November 2, 2015</b>		
<b>Common Name</b>	<b>Scientific Name</b>	<b>Comments</b>
American Crow	<i>Corvus brachyrhynchos</i>	Numerous individuals; very common flying overhead and exploring the Basin banks
Western Gull	<i>Larus occidentalis</i>	Several seen flying overhead
Black Phoebe	<i>Sayornis nigricans</i>	1 observed in channel
Great Egret	<i>Ardea alba</i>	1 landed in Central Basin and remained for several hours
Heermann's Gull	<i>Larus heermanni</i>	1 individual seen on the north side
Anna's Hummingbird	<i>Calypte anna</i>	1 individual heard in and around trees on the east side of the Basin
Mourning Dove	<i>Zenaida macroura</i>	Perched on towers off Admiralty Way
Rock Pigeon	<i>Columba livia</i>	Perched on towers off Admiralty Way and flying overhead
Black-Chinned Hummingbird	<i>Archilocus alexandri</i>	One perched atop a tree along bike path calling
Yellow-rumped Warbler	<i>Dendroica coronate</i>	Seen in a palm tree next to Southeast Channel



## Memorandum

**To:** Rick Sun, Los Angeles County Department of Public Works

**From:** Wendy Katagi, CDM Smith  
Kasie Auger, CDM Smith

**Date:** November 03, 2015

**Subject:** Draft Daily Biological Monitoring for the Oxford Retention Basin Multiuse Enhancement Project

## Introduction

This memorandum summarizes the findings of biological monitoring on November 03, 2015, for the Oxford Retention Basin Multiuse Enhancement project. Information regarding the regulatory drivers and methodology of daily biological monitoring can be found in the Biological Monitoring – Introduction and Methods for Phase 2 Construction Memo, dated June 23, 2015.

Biological monitoring was conducted by Kasie Auger, CDM Smith biologist, beginning at 6:07 am and ending at 3:30 p.m. Weather conditions were clear in the morning transitioning to dark and very windy in the afternoon, with temperatures ranging from 53°F in the morning to a high of 67°F in the afternoon. The day starts off clear with clouds in the east. Strong winds and dark clouds approach the site in the afternoon. It starts to sprinkle lightly at 3:15 and becomes heavier at 3:30. At 3:30 crew finishes packing up and leaves for the day. The biological monitor also leaves for the day. No measurable rain was recorded during construction activities.

During the daily monitoring, the biologist observed activities associated with concrete wall preparations, placement of rock to extend the gabion peninsula, tide gate reconstruction, trash removal, and signage placement. All crews were overseen by the contractor superintendent and the Inspector of Record.

The following sections provide the biologist's field-log notes, with observations of the day's activities and wildlife presence and behavior.

## Biologist's Field Log

6:07 am. Biological monitor arrives on site to conduct initial assessment. The construction trailer gate is open. A few crew members are onsite. While conducting the initial survey, several birds are observed. Crow and western gull fly overs are frequent. Rock Pigeons also fly over Central Basin. A few house sparrows move around in the palms on Washington Boulevard. There is a black phoebe near the stormwater inlet and a dark-eyed junco on the ground near the South East channel. Anna's hummingbirds are seen and heard in the trees along the bike path.

7:00 am. Biological monitor conducts biological awareness training with emphasis on being careful to avoid Monarch butterflies, Great egrets, Snowy egrets, and Anna's hummingbirds. Crews are reminded of the Great Blue Heron and Great Egret seen in the Central Basin yesterday and are instructed to watch out for these birds that often remain close to machinery. Crews are reminded to watch out for Monarch butterflies that remain around the site. Crew are reminded to pick up trash around the worksite and to move slowly in areas where wildlife are present or likely to be present.

7:20 am. Work begins for the day. Work continues on the gabion peninsula and the southwestern tide gates. Several loads of rock will be delivered today for the berm and cement will also be arriving.

7:30 A crow flies over the Central Basin towards the east. A crow walks around the North Mudflat. A gull flies west over Washington Boulevard. Two crows explore the southern slope near cordoned off trees. Two crows explore the northwest peninsula.

8:00 A flock of pigeons fly around the towers off Admiralty Way. A Gull flies overhead toward the Killer Café restaurant. Crows fly over Central Basin moving toward the east and some land on the southern slope.

8:30 A dragonfly flies around the stormwater inlet. One gull flies over Southeast Channel towards the ocean. A black phoebe moves around stormwater inlet.

9:00 A Snowy Egret arrives and lands on the fence surrounding the stormwater inlet. The Egret moves towards a puddle in the Central Basin. The Egret shakes its feet in the mud and stabs at the water with its beak. After a few minutes the egret flies towards and lands in Southeast Channel. The Egret then flies off along Admiralty Way toward the ocean. Anna's hummingbirds are heard and seen in the trees near the bike path.

9:30 A gull flies over the Central Basin toward the west. Two crows fly around the perimeter of the Basin.

10:00 A load of rocks is dumped in the northwest corner of the northwest mudflat and continue periodically throughout the day. A crow lands on the east side of the northwest peninsula. A small white moth flies around vegetation on the west side of the Basin near the trailer. A pigeon flies over the trailer and two crows explore the southern slope.

10:30 Four pigeons fly across the Central Basin to the north. A crow lands on a palm tree on Washington Boulevard. A dragonfly flies near the trailer. Two crows fly across the Central Basin and land in cordoned off trees. A gull circles lazily above the Central Basin.

11:00 A crow flies over the Central Basin and heads north over Washington Boulevard. A mourning dove lands on a fence near the trailer and a crow lands on the southern slope. One Monarch

butterfly flies over the trailer. The crew begins pouring cement into the sidewalk along Washington Boulevard.

11:30 Two crows crisscross over the Central Basin.

12:00 One Monarch butterfly flies over the parking lot. A sparrow lands on the corner of a nearby hotel. The crew and biological monitor break for lunch. The cement crew continues working because they are already pouring cement.

12:50 Work resumes. The cement crew has finished work.

1:00 One unidentified yellow butterfly flies over the West Basin and one gull flies overhead.

1:30 Crows caw in trees by the bike path. One gull flies overhead. An Egret lands in the puddle below the stormwater inlet. It is windy and clear overhead with clouds to the east. The Egret flies closer to the berm to explore another small puddle. A black phoebe lands on the stormwater inlet and chirps from the fence post.

2:00 Two mourning doves land on the fence by the trailer and one crow flies overhead. Dark clouds start rolling in.

2:30 A crow lands on an electrical pole near the stormwater inlet. A gull flies over the parking lot. Two gulls fly overhead.

3:00 Dark clouds approach the site. A Gull soars over the East Basin. A pigeon flies toward a nearby hotel.

3:15 A very light sprinkle begins to fall over the West Basin and it becomes cold and windy. A western gull flies over the Central Basin and struggles to fly in the wind near the palms over Washington Boulevard.

3:30 Crew completes work activities for the day. Biological monitor leaves for the day, as heavier rain begins to fall. No measurable rain was recorded during construction activities.

## **Additional Observations**

Mostly crows and western gulls were observed today. One Great Egret landed in the Central Basin and continued moving from puddle to puddle looking for food. It moved close to the berm but avoided the machinery. After lunch the weather continued to get windy, dark and cold. Few birds were seen after lunch.

## **Conclusions**

Based on observations made during monitoring, the following conclusions were made:

1. Biological awareness training emphasizes caution to avoid harm to birds and wildlife in and around the Basin during construction activities. In general, wildlife sightings are fewer and fewer.
2. In general, wildlife is most active in the morning with a dramatic decrease in observed wildlife activity after 10:00 am. Wildlife activity did not increase during the late afternoon, perhaps due to the high winds.
3. Insects are now less common, but still include several species of dragonflies and butterflies, including Monarchs. Butterflies are attracted to the moist soils and flowering plants.
4. There is little standing water left in the Basin. What is left is in small pools near the east side spillway, the north side spillway, and the tide gates at the west end.
5. Wildlife activity largely consists of flyovers and occurs around the periphery of the project site; very little activity is observed within the Basin itself. Crows and western gull fly overs are now the most prevalent species of wildlife. Wildlife activity is concentrated along Admiralty Way and Washington Boulevard, and near the bike path and Yvonne Burke Park.

**Table 1 provides a list of bird species observed during biological monitoring on November 03, 2015.**

<b>Table 1. Bird Species Observed during Biological Monitoring on November 3, 2015</b>		
<b>Common Name</b>	<b>Scientific Name</b>	<b>Comments</b>
American Crow	<i>Corvus brachyrhynchos</i>	Numerous individuals; very common flying overhead and exploring the Basin banks
Western Gull	<i>Larus occidentalis</i>	Several seen flying overhead
Black Phoebe	<i>Sayornis nigricans</i>	1 observed in channel
Snowy Egret	<i>Egretta thula</i>	1 landed in Central Basin and moved around puddles
Anna's Hummingbird	<i>Calypte anna</i>	1 individual heard in and around trees on the east side of the Basin
Mourning Dove	<i>Zenaida macroura</i>	Perched on towers off Admiralty Way
Rock Pigeon	<i>Columba livia</i>	Perched on towers off Admiralty Way and flying overhead
House Sparrow	<i>Passer domesticus</i>	Seen and heard in the morning in the palms over Washington Boulevard
Dark-Eyed Junco	<i>Junco hyemalis</i>	Seen in the morning on the ground near the southeast channel





## Memorandum

*To: Rick Sun, Los Angeles County Department of Public Works*

*From: Wendy Katagi, CDM Smith  
Kasie Auger, CDM Smith*

*Date: November 04, 2015*

*Subject: Draft Daily Biological Monitoring for the Oxford Retention Basin Multiuse Enhancement Project*

## Introduction

This memorandum summarizes the findings of biological monitoring on November 04, 2015, for the Oxford Retention Basin Multiuse Enhancement project. Information regarding the regulatory drivers and methodology of daily biological monitoring can be found in the Biological Monitoring – Introduction and Methods for Phase 2 Construction Memo, dated June 23, 2015.

Biological monitoring was conducted by Kasie Auger, CDM Smith biologist, beginning at 6:15 am and ending at 5:15 p.m. Weather conditions were clear in the morning and throughout the day. Clouds passed over the site occasionally throughout the day. The temperature ranged from 50°F in the morning to a high of 67°F in the afternoon. No measurable rain was recorded during construction activities.

During the daily monitoring, the biologist observed activities associated with concrete wall preparations, placement of rock to extend the gabion peninsula, tide gate reconstruction, trash removal, and signage placement. The biologist observed tree protection measures. Work is being done to place fence around eucalyptus trees near pump house. All crews were overseen by the contractor superintendent and the Inspector of Record.

The following sections provide the biologist's field-log notes, with observations of the day's activities and wildlife presence and behavior.

## Biologist's Field Log

6:15 am. Biological monitor arrives on site to conduct initial assessment. The construction trailer gate is open. A few crew members are onsite. While conducting the initial survey several birds are observed. Crow and western gull fly overs are frequent. Rock Pigeons also pass over the Central Basin. A few house finches move around in the palms along Washington Boulevard. There are several dark-eyed juncos exploring the ground near the Southeast Channel. Anna's hummingbirds are seen and heard in the trees along the bike path. There was a light rain last night and there is

more water in the southeast channel and a few puddles near the berm. Pumps are in place to pump out water. A pigeon flies around the towers off Admiralty Way.

6:55 am. Biological monitor conducts biological awareness training with emphasis on taking care to avoid Monarch butterflies, Great egrets, Snowy egrets, and Anna's hummingbirds. The Snowy Egret that was in the Basin yesterday is mentioned. With more puddles in the Basin, the egrets may come in search of food. The crews are instructed to watch out for the egrets that are very bold and often remain close to the machinery. A few Monarch butterflies were observed yesterday and the crews are reminded to watch out for these butterflies. Also, they are reminded to pick up garbage around the worksite and to move slowly in areas where wildlife are present or likely to be present.

7:05 am. Work begins for the day. Work continues on the gabion peninsula. Several loads of rock will be delivered today for the berm. Cement will also be arriving.

7:30 A crow lands on a utility pole on the northwest peninsula.

8:00 A bee flies around the northwest peninsula. A few crows fly around the Southeast Channel. One crow flies over the Central Basin and leaves toward the north. One gull flies east over the Central Basin. Crow and gull fly overs continue over the next half hour. A pigeon circles above the Central Basin and leaves over Admiralty Way.

8:30 Several gulls circle over the Basin. A dragonfly flies over the West Basin. One gull and one crow fly east over Washington Boulevard.

9:00 A dragonfly flies over West Basin.

9:30 A gull flies high over the entire Basin and heads west.

10:00 A black phoebe lands on a wooden stake near the construction trailer. The black phoebe moves to another wooden stake in the West Basin. The black phoebe hops from stake to the ground and back several times.

10:30 A Great Egret lands in a puddle just below the stormwater inlet. A black phoebe flies around the northeast peninsula and stormwater inlet. Loads of rock and dirt continue to be delivered. One Monarch butterfly flies over bike path. Anna's hummingbirds are seen and heard in the trees on the bike path. A crow lands on the northeast mudflat. A Monarch butterfly flies over the southeast channel.

11:00 A black phoebe flies around the southeast channel and occasionally dips into the water.

11:30 A black phoebe flies around the southwestern tide gates.

12:00 Crew and biological monitor break for lunch.

12:30 Work resumes.

1:00 A mourning dove lands on tower off Admiralty Way. Two gulls fly south over the parking lot. Two gulls circle over the Basin and head east. A Great Egret heads west over the Basin. A black phoebe flies from the south towards the north across the West Basin. A gull flies west to east across Basin.

1:30 Two crows fly south over East Basin.

2:00 A black phoebe lands on a wooden stake on the Northeast Peninsula. A Great Blue Heron stands in the puddle just below the storm water inlet. A dark-eyed junco hops around and chirps from protected pine tree north of the Southeast Channel. The Great Blue Heron moves into the Central Basin and then flies off toward the north as an excavator slowly approaches.

2:30 No wildlife are observed during this time frame.

3:00 A crow lands on south slope of the East Basin. A gull flies from west to east across Basin. Two pigeons fly towards Killer Shrimp restaurant.

3:30 A European starling sits atop a utility pole next to the Rain-for-Rent trailer.

4:00 A crow flies over the West Basin. A gull flies towards the Killer Shrimp restaurant.

4:30 A pigeon flies in circles above the West Basin.

5:15 Crew and biological monitor leave for the day.

## **Additional Observations**

Mostly crows and western gulls were observed today. A Great Egret landed in the puddle just below the stormwater inlet and one flew overhead. A Great Blue Heron also landed in the puddle just below the stormwater inlet and moved toward a puddle closer to the berm. The Great Blue Heron left the site when machinery drove by.

## **Conclusions**

Based on observations made during monitoring, the following conclusions were made:

1. Biological awareness training emphasizes caution to avoid harm to birds and wildlife in and around the Basin during construction activities. In general, wildlife sightings are fewer and fewer.
2. In general, wildlife is most active in the morning with a dramatic decrease in observed wildlife activity after 10:00 am. Wildlife activity did not increase during the late afternoon, perhaps due to the high winds.

3. Insects are now less common, but still include several species of dragonflies and butterflies, including monarchs. Butterflies are attracted to the moist soils and flowering plants.
4. There are some large puddles in the Basin today due to the rain last night. What is left is in the East Basin and Southeast Channel. There are also some smaller pools near the east side spillway, the north side spillway, and the tide gates at the west end.
5. Wildlife activity largely consists of flyovers and occurs around the periphery of the project site; very little activity is observed within the Basin itself. Crows and western gull fly overs are now the most prevalent species of wildlife. Wildlife activity is concentrated along Admiralty Way and Washington Boulevard, and near the bike path and Yvonne Burke Park.
6. Biological monitor surveyed the entire Basin to ensure tree protection measurements were in place. Three of the four locations have fencing surrounding trees and a fourth fence is being installed around the eucalyptus trees near the pump house.

**Table 1 provides a list of bird species observed during biological monitoring on November 04, 2015.**

<b>Table 1. Bird Species Observed during Biological Monitoring on November 4, 2015</b>		
<b>Common Name</b>	<b>Scientific Name</b>	<b>Comments</b>
American Crow	<i>Corvus brachyrhynchos</i>	Numerous individuals; very common flying overhead and exploring the Basin banks
Western Gull	<i>Larus occidentalis</i>	Several seen flying overhead
Black Phoebe	<i>Sayornis nigricans</i>	Several observed throughout the day
Great Egret	<i>Ardea alba</i>	1 flew over the Basin from east to west
Anna's Hummingbird	<i>Calypte anna</i>	Many seen and heard in and around trees along the bike path
Mourning Dove	<i>Zenaida macroura</i>	Perched on towers off Admiralty Way
Rock Pigeon	<i>Columba livia</i>	Flying overhead throughout the day
House Finch	<i>Carpodacus mexicanus</i>	Seen and heard in the morning in the palms over Washington Boulevard.
Dark-Eyed Junco	<i>Junco hyemalis</i>	Seen in the morning on the ground near the Southeast Channel and in pine near bike path
Great Blue Heron	<i>Ardea herodias</i>	Seen in puddle below stormwater inlet
European Starling	<i>Sturnus vulgaris</i>	Seen atop utility pole next to rent-the-rain trailer



## Memorandum

**To:** Rick Sun, Los Angeles County Department of Public Works

**From:** Wendy Katagi, CDM Smith  
Kasie Auger, CDM Smith

**Date:** November 05, 2015

**Subject:** Draft Daily Biological Monitoring for the Oxford Retention Basin Multiuse Enhancement Project

## Introduction

This memorandum summarizes the findings of biological monitoring on November 05, 2015, for the Oxford Retention Basin Multiuse Enhancement project. Information regarding the regulatory drivers and methodology of daily biological monitoring can be found in the Biological Monitoring – Introduction and Methods for Phase 2 Construction Memo, dated June 23, 2015.

Biological monitoring was conducted by Kasie Auger, CDM Smith biologist, beginning at 6:15 am and ending at 4:30pm. Weather conditions were clear in the morning and remained clear throughout the day. The temperature ranged from 51°F in the morning to a high of 70°F in the afternoon. No measurable rain was recorded during construction activities.

During the daily monitoring, the biologist observed activities associated with concrete wall preparations, placement of rock to extend the gabion peninsula, tide gate reconstruction, trash removal, and signage placement. The biologist observed tree protection measures. The biologist checked onsite trees for tree protection measures. Work is being done to place fence around eucalyptus trees near pump house. All crews were overseen by the contractor superintendent and the Inspector of Record.

The following sections provide the biologist's field-log notes, with observations of the day's activities and wildlife presence and behavior.

## Biologist's Field Log

6:15 am. Biological monitor arrives onsite to conduct initial assessment. The construction trailer gate is open. A few crew members are on site. While conducting the initial survey several birds are observed. Crow and western gull fly overs are frequent. A black phoebe lands on the northeast peninsula. A crow lands in the stormwater inlet. Anna's hummingbirds are seen and heard in the trees near the bike path. Tree protection still needs to be installed around the eucalyptus trees next to the pump house. There is water in the southeast channel and in the East Basin. There is also a large puddle north of the berm in the Central Basin. If herons or egrets visit the site today these are the places they are likely to go. Rock pigeons fly around near the towers off Admiralty Way.

6:55 am. Biological monitor conducts biological awareness training with emphasis on taking care to avoid Monarch butterflies, Great egrets, Snowy egrets, Great Blue Herons and Anna's hummingbirds. The Great Egret and Great Blue Heron that were in the Basin yesterday are mentioned. With more puddles and standing water in the Basin the egrets and herons may come in search of food. The crews are instructed to watch out for the egrets that are very bold and often remain close to the machinery. A few Monarch butterflies were observed yesterday and the crews are reminded to watch out for these butterflies. Crews are also reminded to pick up garbage around the worksite and to move slowly in areas where wildlife are present or likely to be present.

7:00 Work begins. A painted lady butterfly lands on the northwest peninsula.

7:30 A crow flies over the Basin from east to west. A crow explores the north mudflat. A crow explores the northwest mudflat.

8:00 A crow perches and caws from atop a light pole over the trailer. Pigeons circle around towers off Admiralty Way and land on a balcony.

8:30 A gull flies south toward Admiralty Way. Pigeons circle over the parking lot. A crow flies north across the Central Basin.

9:00 A Monarch butterfly flies over the northwest peninsula and moves off over northwest mudflat. Two gulls fly east over Admiralty Way.

9:30 Two crows chase each other over the Central Basin. A Monarch butterfly flies over northwest peninsula. A Peregrine Falcon soars in from the northeast and disappears behind the towers off Admiralty Way. Two pigeons circle over the Basin and land on a balcony on the towers. A dragonfly circles around northwest peninsula.

10:00 A gull flies north over the Basin. A black phoebe sits atop the concrete wall of the stormwater inlet. The phoebe continues moving about the ground and stormwater inlet. A Monarch butterfly flies over the corner of Washington Boulevard and the bike path. A phoebe lands on a utility wire over the East Basin. The phoebe tries and fails to catch an insect in flight. The phoebe then lands on the wire of the utility pole and continues to call out for several minutes.

10:30 A Monarch butterfly flies north over the West Basin and lands on potted vegetation next to the rain for rent trailer. An unidentified white butterfly moves around the west tide gates.

11:00 An unidentified yellow butterfly, likely a Sulphur, flies west over the West Basin. A dragonfly flies around the west tide gates. A Monarch butterfly lands in protected pine tree next to west tide gates. A Monarch butterfly flies around the West Basin close to machinery and then exits north.

11:30 Pigeons fly west across the Basin. A Monarch butterfly flies south over the West Basin.

12:00 Biological monitor and crew break for lunch.

12:30 Work resumes. No wildlife are observed during this time frame.

1:00 A gull flies west across the West Basin. Several pigeons fly above the parking lot. Two pigeons make a "U" around the West Basin flying south and then turning and heading north where the way they came. A black phoebe lands on the northeast peninsula. Anna's hummingbirds are heard but not seen in the trees hanging over the bike path.

1:30 A black phoebe lands in the mud in the southeast channel. A Monarch butterfly lands on some riparian vegetation on the southern edge of the southeast channel. Several Monarch butterflies are seen fluttering about in the trees hanging over the bike path at the far end of the southeast channel. A Red Admiral butterfly is seen on the ground next to the southeast channel.

2:00 A crow flies west along Admiralty Way. Pigeons circle around the parking lot.

2:30 A gull flies diagonally from the southwest to the northeast across the West Basin. A black phoebe flies across the Central Basin toward the north. A gull flies over the West Basin.

3:00 Two gulls fly over the West Basin.

3:30 A black phoebe lands on a fence post enclosing the stormwater inlet. The phoebe continues to move between the northeast peninsula and the water within the stormwater inlet. A gull lands in the East Basin and explores the puddles. Anna's hummingbirds are heard in the trees next to the bike path.

4:00 A gull flies west over the Basin.

4:30 Crew and biological monitor leave for the day.

## **Additional Observations**

Mostly crows and western gulls were observed today. Bird activity overall today was lower than on previous days this week. Many more Monarch butterflies were seen today than on previous days. One butterfly flew close to an excavator but exited the site safely.

## **Conclusions**

Based on observations made during monitoring, the following conclusions were made:

1. Biological awareness training emphasizes caution to avoid harm to birds and wildlife in and around the Basin during construction activities. In general, wildlife sightings are fewer and fewer.
2. In general, wildlife is most active in the morning with a dramatic decrease in observed wildlife activity after 10:00 am. Today activity was low for the entire day, even in the morning, when

compared to the last few days. No egrets or herons were observed today, which is unlike the last three days.

3. Insects are now less common, but still include several species of dragonflies and butterflies, including Monarchs. Butterflies are attracted to the moist soils and flowering plants.
4. There are still large puddles in the Basin today due to the rain event two nights ago. Although water still remains, the level in the East Basin and southeast channel has gone down likely due to evaporation and the lack of rain in the last 24 hours.
5. Wildlife activity largely consists of flyovers and occurs around the periphery of the project site; very little activity is observed within the Basin itself. Crows and western gull fly overs are now the most prevalent species of wildlife. Wildlife activity is concentrated along Admiralty Way and Washington Boulevard, and near the bike path and Yvonne Burke Park.
6. Biological monitor surveyed the entire Basin to ensure tree protection measurements were in place. Three of the four locations have fencing surrounding trees and a fourth fence is being installed around the eucalyptus trees near the pump house.

**Table 1 provides a list of bird species observed during biological monitoring on November 05, 2015.**

<b>Table 1. Bird Species Observed during Biological Monitoring on November 5, 2015</b>		
<b>Common Name</b>	<b>Scientific Name</b>	<b>Comments</b>
American Crow	<i>Corvus brachyrhynchos</i>	Numerous individuals; Very common flying overhead and exploring the Basin banks
Western Gull	<i>Larus occidentalis</i>	Several seen flying overhead
Black Phoebe	<i>Sayornis nigricans</i>	Several observed throughout the day
Anna's Hummingbird	<i>Calypte anna</i>	Many seen and heard in and around trees along the bike path
Rock Pigeon	<i>Columba livia</i>	Flying overhead throughout the day
Peregrine Falcon	<i>Falco peregrinus</i>	Seen soaring high above the Basin and disappearing behind towers off Admiralty Way